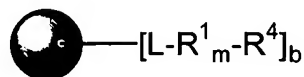



**In the claims:**

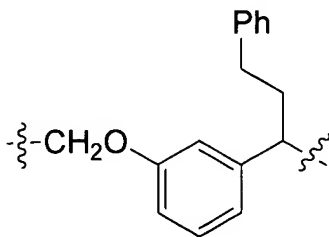
1. (Original) A process for the preparation of a compound of the formula I:



I

wherein

 is an insoluble solid support selected from the group consisting of: poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is -CH<sub>2</sub>-, -C(CH<sub>3</sub>)<sub>2</sub>-, -CH(CH<sub>3</sub>)-, -(CH<sub>2</sub>)<sub>n</sub>CH(CN)-, -(CH<sub>2</sub>)<sub>n</sub>CH(CO<sub>2</sub>Me)-, -(CH<sub>2</sub>)<sub>n</sub>CH(Ph)-, -(CH<sub>2</sub>)<sub>n</sub>C(CH<sub>3</sub>, Ph)-, -CH(CH<sub>2</sub>CH<sub>2</sub>Ph)-, or

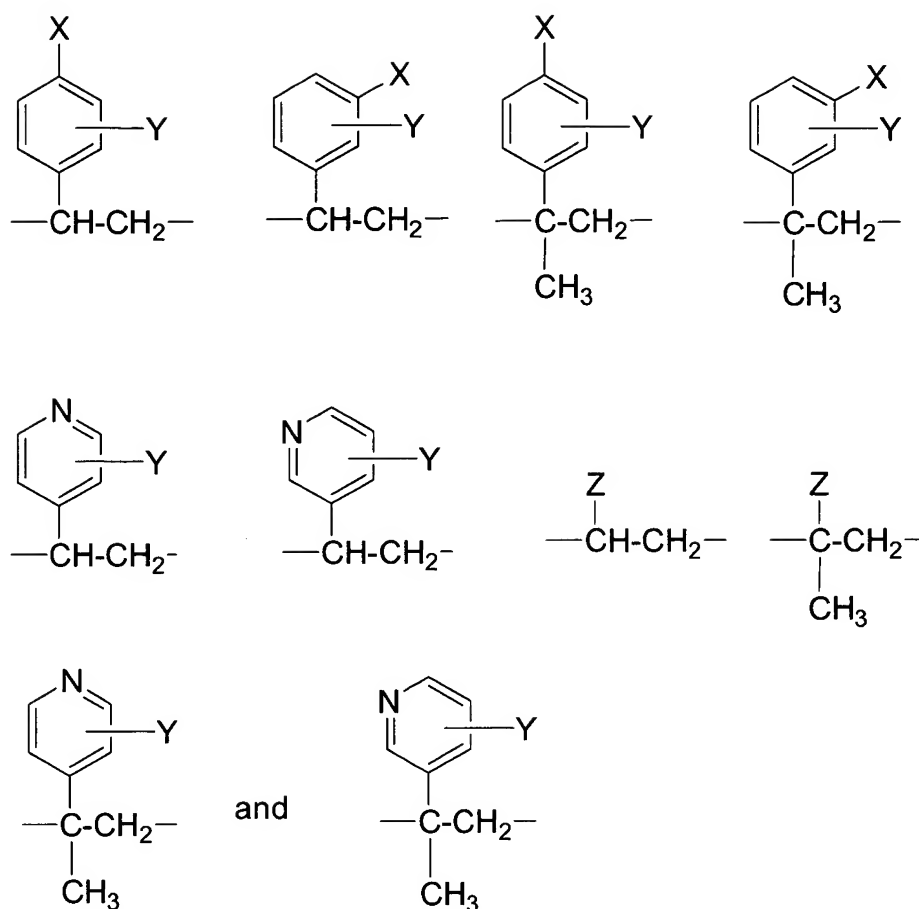


n is zero or an integer from 1 to 5;

m is zero or an integer from 1 to 100;

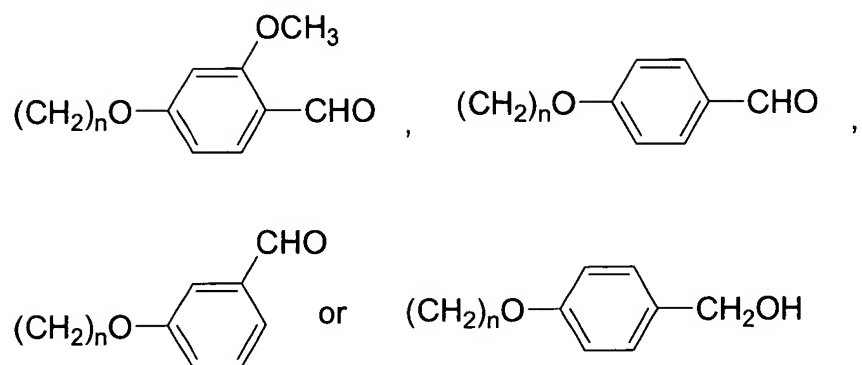
b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;

R<sup>1</sup> is selected from:



wherein

X is H, F,  $(\text{CH}_2)_n\text{Cl}$ ,  $(\text{CH}_2)_n\text{Br}$ ,  $(\text{CH}_2)_n\text{I}$ ,  $\text{B}(\text{OH})_2$ ,  $(\text{CH}_2)_n\text{CH}=\text{CH}_2$ ,  $\text{NCO}$ ,  $\text{CH}_2\text{NCO}$ ,  $\text{CH}(\text{CH}_3)\text{NCO}$ ,  $\text{C}(\text{CH}_3)_2\text{NCO}$ ,  $\text{CO}_2\text{Me}$ ,  $\text{CO}_2\text{Et}$ ,  $\text{CO}_2(\text{t-Bu})$ ,  $\text{CO}_2\text{H}$ ,  $\text{COC1}$ ,  $\text{CO}_2\text{CH}(\text{CF}_3)_2$ ,  $\text{CO}_2\text{Ph}$ ,  $\text{CO}_2(\text{pentafluorophenyl})$ ,  $\text{CO}_2(\text{pentachlorophenyl})$ ,  $\text{CO}_2(\text{N-succinimidyl})$ ,  $\text{C}(\text{OMe})_3$ ,  $\text{C}(\text{OEt})_3$ ,  $(\text{CH}_2)_n\text{OH}$ ,  $(\text{CH}_2)_n\text{CH}(\text{OH})\text{CH}_2\text{OH}$ ,  $(\text{CH}_2)_n\text{SH}$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SH}$ ,  $(\text{CH}_2)_n\text{NHC}(=\text{S})\text{NH}_2$ ,  $(\text{CH}_2)_n\text{NH}_2$ ,  $(\text{CH}_2)_n\text{N}(\text{Me})_2$ ,  $(\text{CH}_2)_n\text{N}(\text{Et})_2$ ,  $(\text{CH}_2)_n(\text{iPr})_2$ ,  $\text{CH}(\text{CH}_3)\text{NH}_2$ ,  $\text{C}(\text{CH}_3)_2\text{NH}_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$ ,  $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$ ,  $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$ ,  $(\text{CH}_2)_n(\text{morpholin-4-yl})$ ,  $(\text{CH}_2)_n(\text{piperidin-1-yl})$ ,  $(\text{CH}_2)_n(4\text{-methypiperazin-1-yl})$ ,  $\text{N}(\text{SO}_2\text{CF}_3)_2$ ,  $(\text{CH}_2)_n\text{CHO}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$ ,  $\text{P}(\text{Ph})_2$ ,  $\text{P}(\text{o-tolyl})_2$ ,

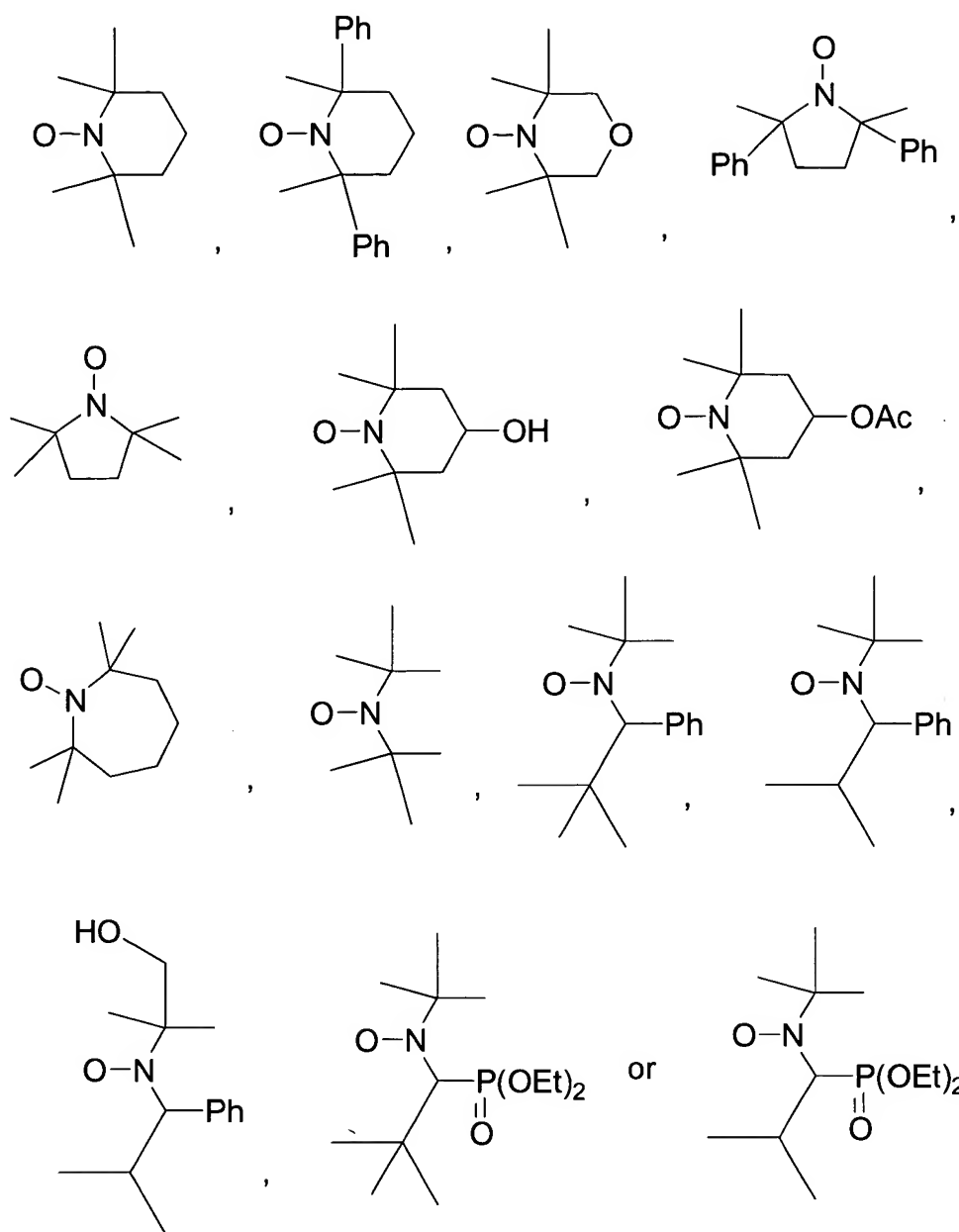


wherein n is zero or an integer from 1 to 5 ;

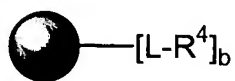
Y is H, Cl, Br, F, OH, or OMe;

Z is NCO, CO<sub>2</sub>Me, CO<sub>2</sub>Et, CO<sub>2</sub>(i-Pr), CO<sub>2</sub>(n-Bu), CO<sub>2</sub>(t-Bu), CN, CO<sub>2</sub>H, COCl,  
 CO<sub>2</sub>CH(CF<sub>3</sub>)<sub>2</sub>, CO<sub>2</sub> (pentafluorophenyl), CO<sub>2</sub>(pentachlorophenyl), CO<sub>2</sub>Ph, CO<sub>2</sub>(N—  
 succinimidyl), C(OMe)<sub>3</sub>, C(OEt)<sub>2</sub>, CON(OCH<sub>3</sub>)CH<sub>3</sub>, CHO, CH<sub>2</sub>OH, or C(CH<sub>3</sub>)<sub>2</sub>OH;  
 and

R<sup>4</sup> is

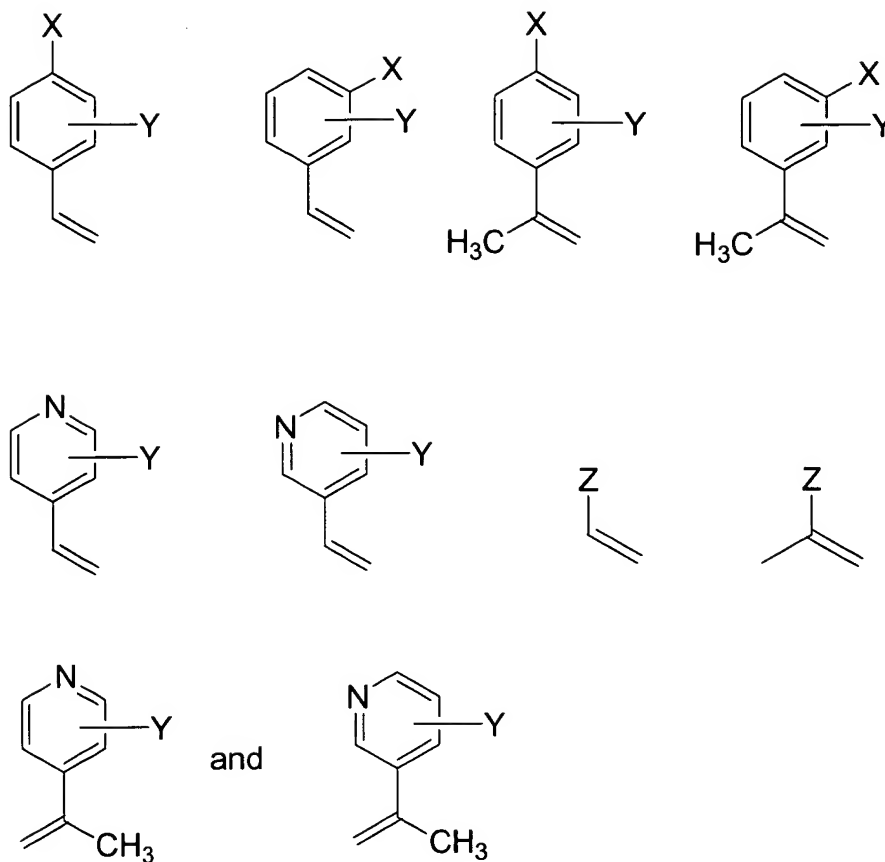


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

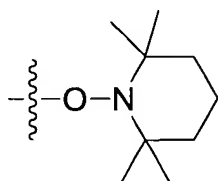


II

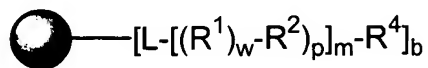
and a compound III selected from:



2. (Original) The process according to Claim 1 wherein  $R^4$  is



3. (Original) A process for the preparation of a compound of the formula IV:



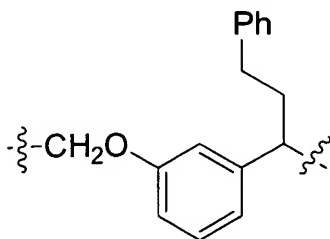
IV

wherein



is an insoluble solid support selected from the group consisting of:

poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is  $-\text{CH}_2-$ ,  $-\text{C}(\text{CH}_3)_2-$ ,  $-\text{CH}(\text{CH}_3)-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{CN})-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{Me})-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$ ,  $-(\text{CH}_2)_n\text{C}(\text{CH}_3, \text{Ph})-$ ,  $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$ , or



$n$  is zero or an integer from 1 to 5;

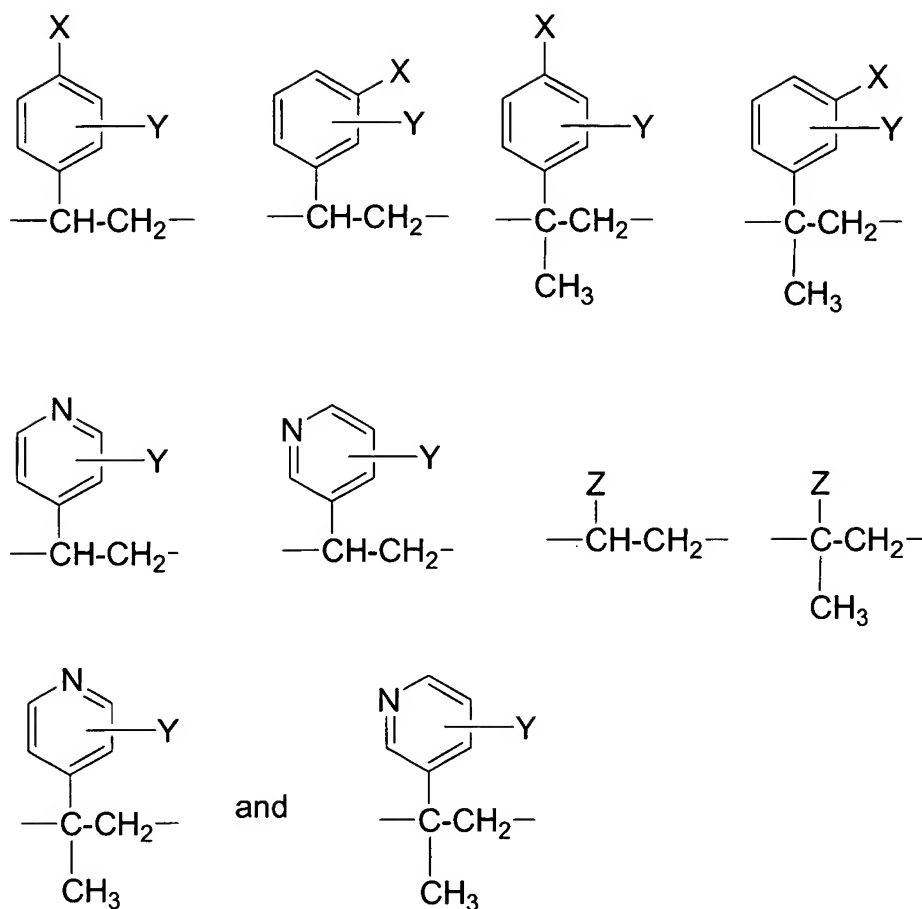
$m$  is zero or an integer from 1 to 100;

$w$  is an integer from 1 to 10;

$p$  is zero or an integer from 1 to 10;

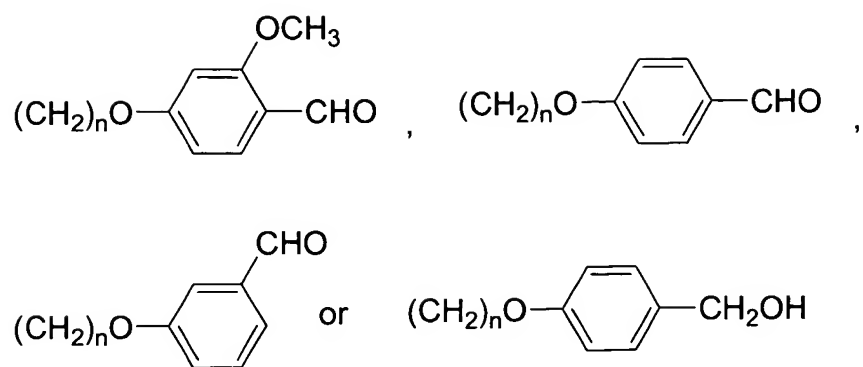
$b$  is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;

$R^1$  and  $R^2$  are each independently the same or different and are selected from



wherein

X is H, F,  $(\text{CH}_2)_n\text{Cl}$ ,  $(\text{CH}_2)_n\text{Br}$ ,  $(\text{CH}_2)_n\text{I}$ ,  $\text{B}(\text{OH})_2$ ,  $(\text{CH}_2)_n\text{CH}=\text{CH}_2$ ,  $\text{NCO}$ ,  $\text{CH}_2\text{NCO}$ ,  $\text{CH}(\text{CH}_3)\text{NCO}$ ,  $\text{C}(\text{CH}_3)_2\text{NCO}$ ,  $\text{CO}_2\text{Me}$ ,  $\text{CO}_2\text{Et}$ ,  $\text{CO}_2(\text{t-Bu})$ ,  $\text{CO}_2\text{H}$ ,  $\text{COC1}$ ,  $\text{CO}_2\text{CH}(\text{CF}_3)_2$ ,  $\text{CO}_2\text{Ph}$ ,  $\text{CO}_2(\text{pentafluorophenyl})$ ,  $\text{CO}_2(\text{pentachlorophenyl})$ ,  $\text{CO}_2(\text{N-succinimidyl})$ ,  $\text{C}(\text{OMe})_3$ ,  $\text{C}(\text{OEt})_3$ ,  $(\text{CH}_2)_n\text{OH}$ ,  $(\text{CH}_2)_n\text{CH}(\text{OH})\text{CH}_2\text{OH}$ ,  $(\text{CH}_2)_n\text{SH}$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{SH}$ ,  $(\text{CH}_2)_n\text{NHC}(=\text{S})\text{NH}_2$ ,  $(\text{CH}_2)_n\text{NH}_2$ ,  $(\text{CH}_2)_n\text{N}(\text{Me})_2$ ,  $(\text{CH}_2)_n\text{N}(\text{Et})_2$ ,  $(\text{CH}_2)_n(\text{iPr})_2$ ,  $\text{CH}(\text{CH}_3)\text{NH}_2$ ,  $\text{C}(\text{CH}_3)_2\text{NH}_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2$ ,  $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$ ,  $\text{CH}_2\text{NHCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$ ,  $\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{OH})_2$ ,  $(\text{CH}_2)_n(\text{morpholin-4-yl})$ ,  $(\text{CH}_2)_n(\text{piperidin-1-yl})$ ,  $(\text{CH}_2)_n(4\text{-methypiperazin-1-yl})$ ,  $\text{N}(\text{SO}_2\text{CF}_3)_2$ ,  $(\text{CH}_2)_n\text{CHO}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{iPr})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})(\text{tBu})\text{H}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Me})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Et})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{i-Pr})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{Ph})_2\text{Cl}$ ,  $(\text{CH}_2)_n\text{Si}(\text{tBu})(\text{Ph})\text{Cl}$ ,  $\text{P}(\text{Ph})_2$ ,  $\text{P}(\text{o-tolyl})_2$ ,



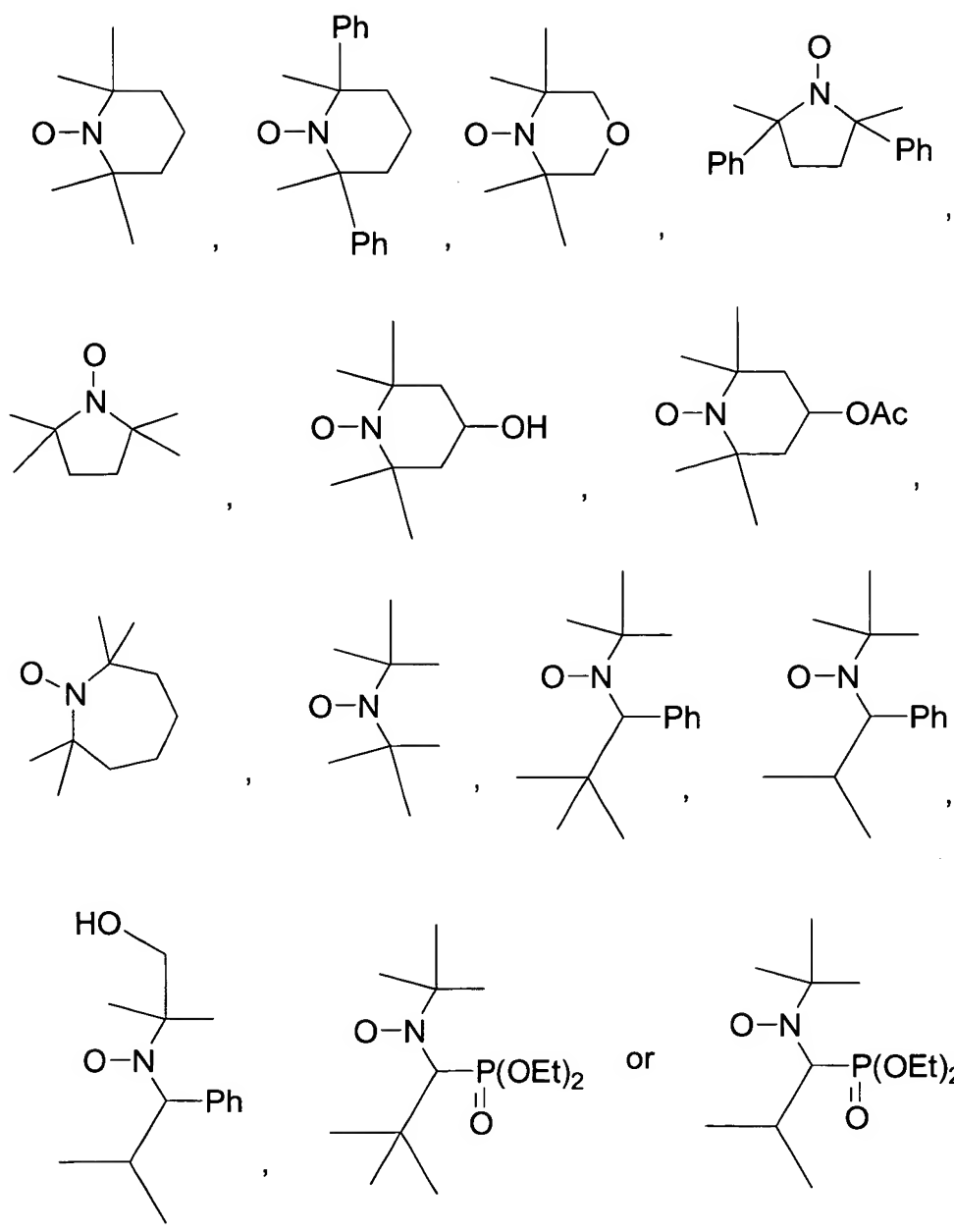
wherein n is zero or an integer from 1 to 5;

Y is H, Cl, Br, F, OH, or OMe;

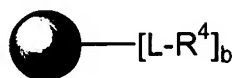
Z is NCO, CO<sub>2</sub>Me, CO<sub>2</sub>Et, CO<sub>2</sub>(i-Pr), CO<sub>2</sub>(n-Bu), CO<sub>2</sub>(t-Bu), CN, CO<sub>2</sub>H, COCl, CO<sub>2</sub>CH(CF<sub>3</sub>)<sub>2</sub>, CO<sub>2</sub>(pentafluorophenyl), CO<sub>2</sub>(pentachlorophenyl), CO<sub>2</sub>Ph, CO<sub>2</sub>(N-succinimidyl), C(OMe)<sub>3</sub>, C(OEt)<sub>2</sub>, CON(OCH<sub>3</sub>)CH<sub>3</sub>, CHO, CH<sub>2</sub>OH, or C(CH<sub>3</sub>)<sub>2</sub>OH; and

R<sup>4</sup> is



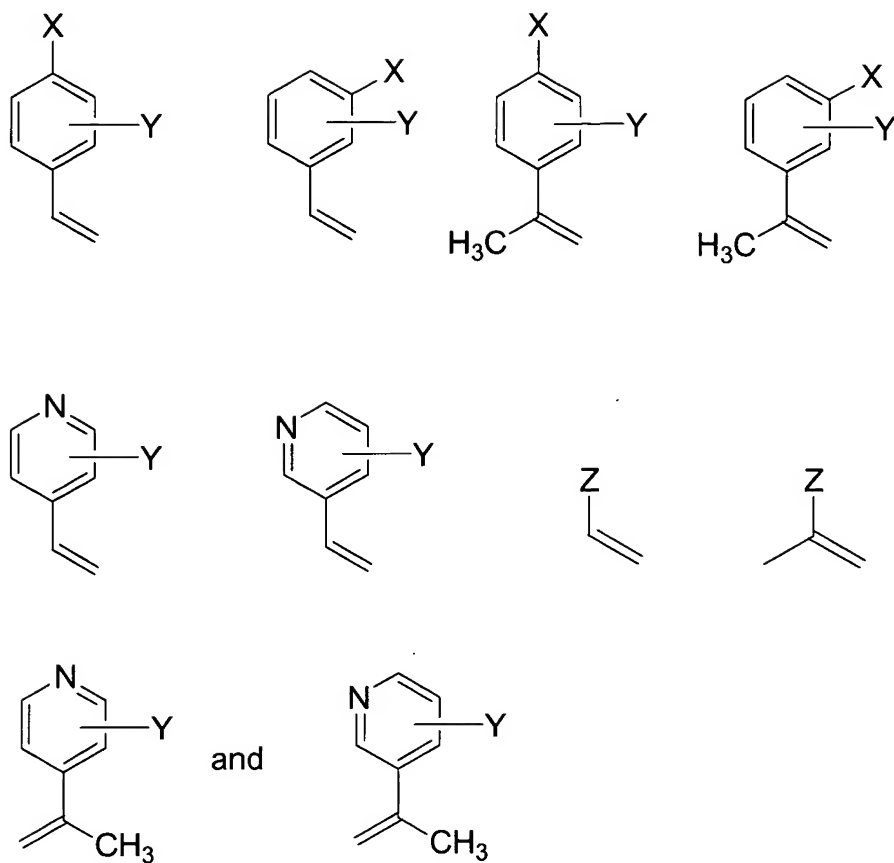


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

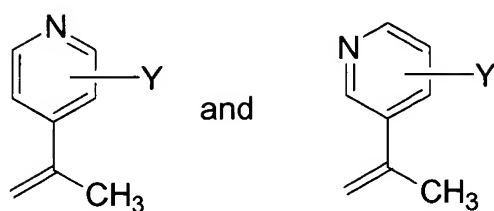
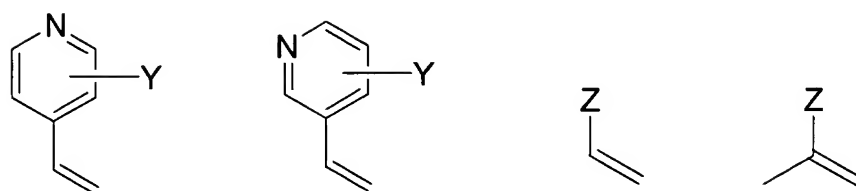
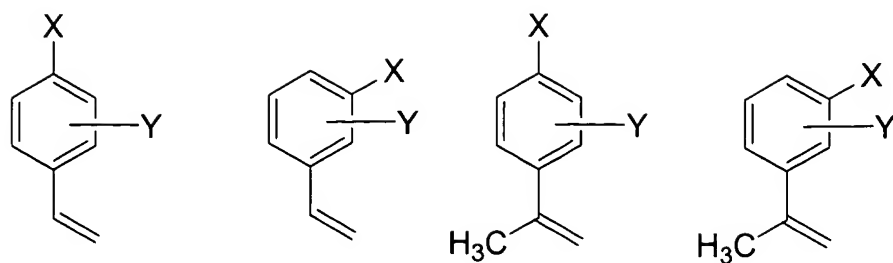


II ,

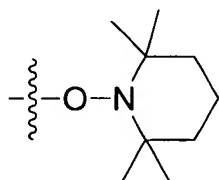
a compound III selected from:



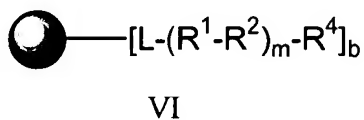
and a compound V selected from:



4. (Original) The process according to Claim 3 wherein  $R^4$  is



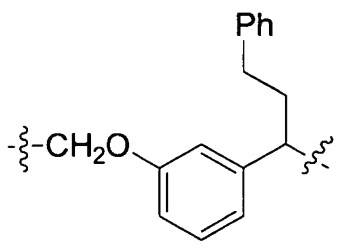
5. (Original) A process for the preparation of a compound of the formula VI:



wherein

is an insoluble solid support selected from the group consisting of:

poly(styrene-divinylbenzene), macroreticular poly(styrene-divinylbenzene), polystyrene which is radiation grafted to polypropylene, polystyrene which is radiation grafted to polyethylene, polystyrene which is radiation grafted to poly(tetrafluoroethylene), and polystyrene which is radiation grafted to poly(ethylene-tetrafluoroethylene) wherein the insoluble solid support is in a shape selected from a bead, a tube, a rod, a ring, a disk, or a well; L is  $-\text{CH}_2-$ ,  $-\text{C}(\text{CH}_3)_2-$ ,  $-\text{CH}(\text{CH}_3)-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{CN})-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{CO}_2\text{Me})-$ ,  $-(\text{CH}_2)_n\text{CH}(\text{Ph})-$ ,  $-(\text{CH}_2)_n\text{C}(\text{CH}_3, \text{Ph})-$ ,  $-\text{CH}(\text{CH}_2\text{CH}_2\text{Ph})-$ , or



n is zero or an integer from 1 to 5;

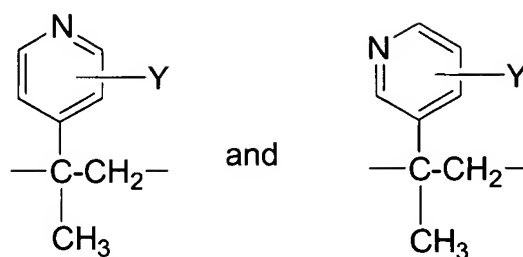
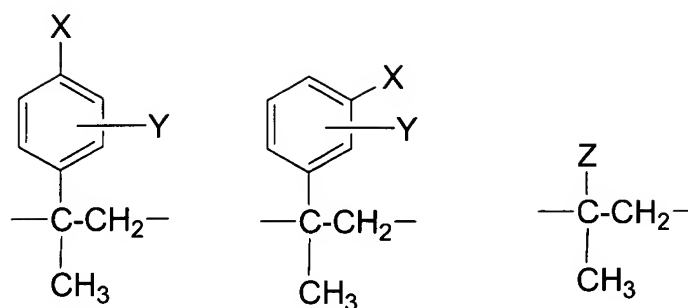
m is zero or an integer from 1 to 100;

w is an integer from 1 to 10;

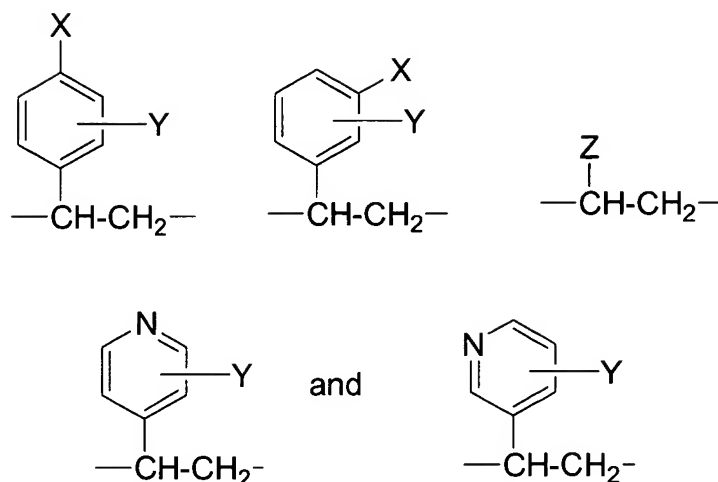
p is zero or an integer from 1 to 10;

b is mMol content of initiator or solid-supported polymer per gram of insoluble solid support and is about 0.1 to about 5.0 mMol per gram;

$\text{R}^1$  is selected from



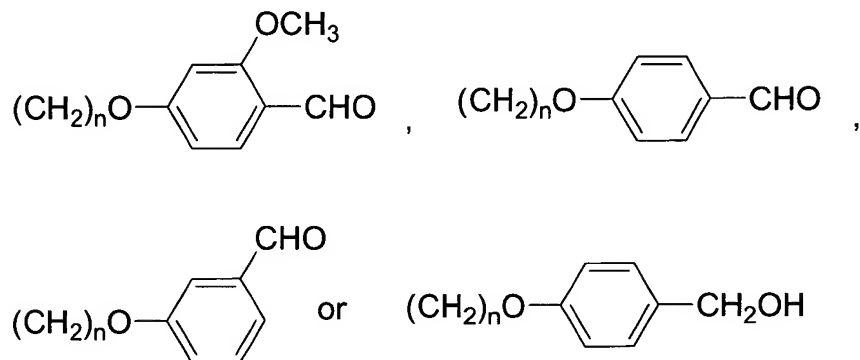
$R^2$  is selected from



wherein

X is H, F,  $(CH_2)_nCl$ ,  $(CH_2)_nBr$ ,  $(CH_2)_nI$ ,  $B(OH)_2$ ,  $(CH_2)_nCH=CH_2$ , NCO,  $CH_2NCO$ ,  $CH(CH_3)NCO$ ,  $C(CH_3)_2NCO$ ,  $CO_2Me$ ,  $CO_2Et$ ,  $CO_2(t-Bu)$ ,  $CO_2H$ ,  $COCl$ ,  $CO_2CH(CF_3)_2$ ,  $CO_2Ph$ ,  $CO_2$ (pentafluorophenyl),  $CO_2$ (pentachlorophenyl),  $CO_2$ (N-succinimidyl),  $C(OMe)_3$ ,  $C(OEt)_3$ ,  $(CH_2)_nOH$ ,  $(CH_2)_nCH(OH)CH_2OH$ ,  $(CH_2)_nSH$ ,  $CH_2NHCH_2CH_2SH$ ,  $(CH_2)_nNHC(=S)NH_2$ ,  $(CH_2)_nNH_2$ ,  $(CH_2)_nN(Me)_2$ ,  $(CH_2)_nN(Et)_2$ ,  $(CH_2)_n(iPr)_2$ ,  $CH(CH_3)NH_2$ ,  $C(CH_3)_2NH_2$ ,  $CH_2NHCH_2CH_2NH_2$ ,  $CH_2NHCH_2CH_2NHCH_2CH_2NH_2$ ,

CH<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>NHCH<sub>2</sub>CH<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>)<sub>2</sub>, CH<sub>2</sub>N(CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub>,  
 (CH<sub>2</sub>)<sub>n</sub>(morpholin-4-yl), (CH<sub>2</sub>)<sub>n</sub>(piperidin-1-yl), (CH<sub>2</sub>)<sub>n</sub>(4-methylpiperazin-1-yl),  
 N(SO<sub>2</sub>CF<sub>3</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>CHO, (CH<sub>2</sub>)<sub>n</sub>Si(Me)<sub>2</sub>H, (CH<sub>2</sub>)<sub>n</sub>Si(Et)<sub>2</sub>H, (CH<sub>2</sub>)<sub>n</sub>Si(iPr)<sub>2</sub>H,  
 (CH<sub>2</sub>)<sub>n</sub>Si(tBu)<sub>2</sub>H, (CH<sub>2</sub>)<sub>n</sub>Si(Ph)<sub>2</sub>H, (CH<sub>2</sub>)<sub>n</sub>Si(Ph)(tBu)H, (CH<sub>2</sub>)<sub>n</sub>Si(Me)<sub>2</sub>Cl, (CH<sub>2</sub>)<sub>n</sub>Si(Et)<sub>2</sub>Cl,  
 (CH<sub>2</sub>)<sub>n</sub>Si(i-Pr)<sub>2</sub>Cl, (CH<sub>2</sub>)<sub>n</sub>Si(tBu)<sub>2</sub>Cl, (CH<sub>2</sub>)<sub>n</sub>Si(Ph)<sub>2</sub>Cl, (CH<sub>2</sub>)<sub>n</sub>Si(tBu)(Ph)Cl, P(Ph)<sub>2</sub>,  
 P(o-tolyl)<sub>2</sub>,

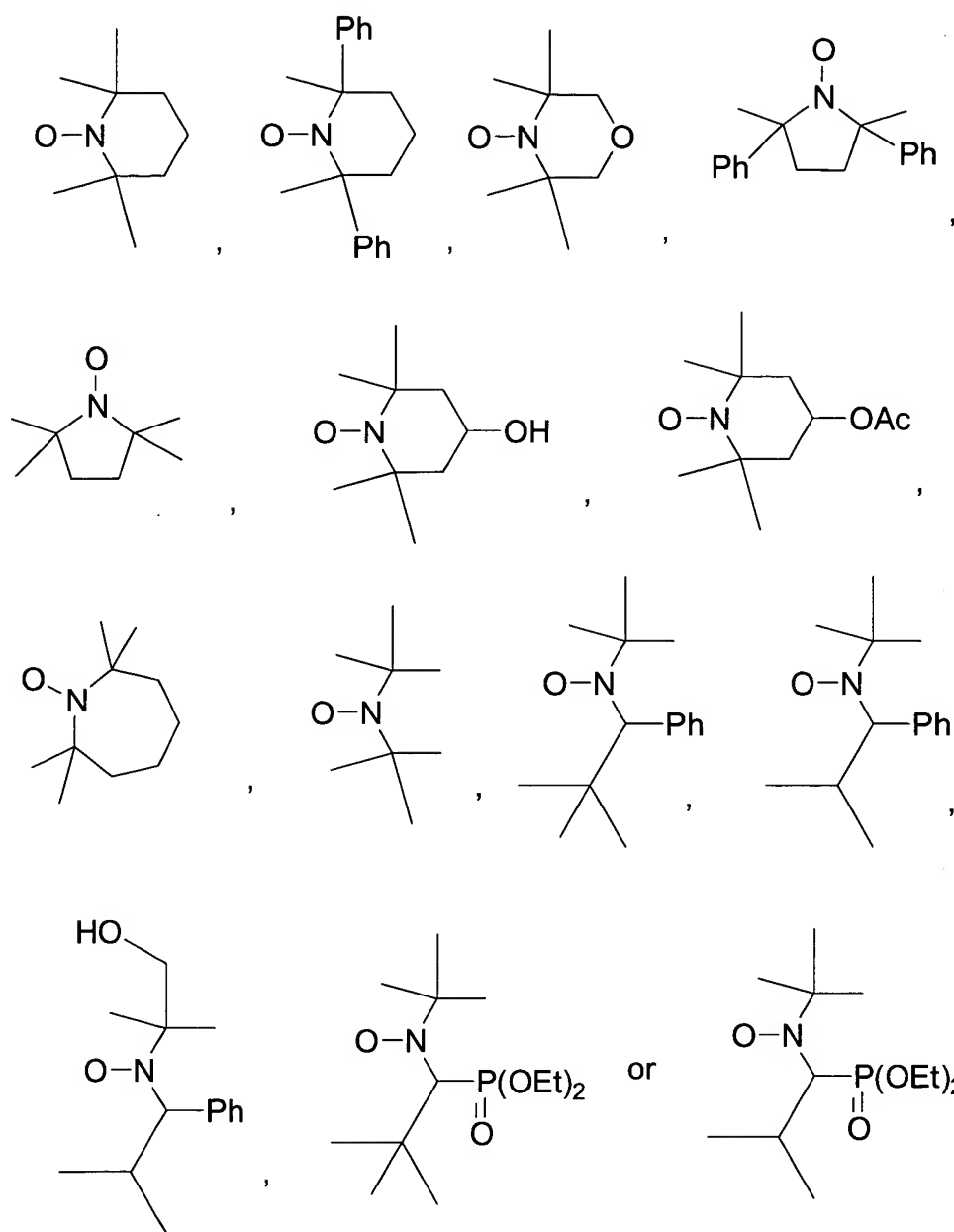


wherein n is zero or an integer from 1 to 5;

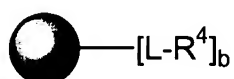
Y is H, Cl, Br, F, OH, or OMe;

Z is NCO, CO<sub>2</sub>Me, CO<sub>2</sub>Et, CO<sub>2</sub>(i-Pr), CO<sub>2</sub>(n-Bu), CO<sub>2</sub>(t-Bu), CN, CO<sub>2</sub>H, COCl,  
 CO<sub>2</sub>CH(CF<sub>3</sub>)<sub>2</sub>, CO<sub>2</sub>(pentafluorophenyl), CO<sub>2</sub>(pentachlorophenyl), CO<sub>2</sub>Ph, CO<sub>2</sub>(N-  
 succinimidyl), C(OMe)<sub>3</sub>, C(OEt)<sub>2</sub>, CON(OCH<sub>3</sub>)CH<sub>3</sub>, CHO, CH<sub>2</sub>OH, or C(CH<sub>3</sub>)<sub>2</sub>OH; and

R<sup>4</sup> is

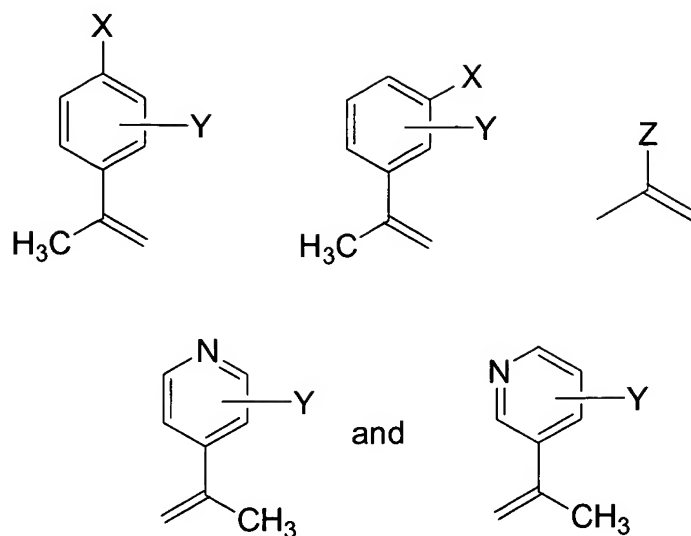


which comprises the step of microwave irradiating a mixture comprising a compound of the formula II

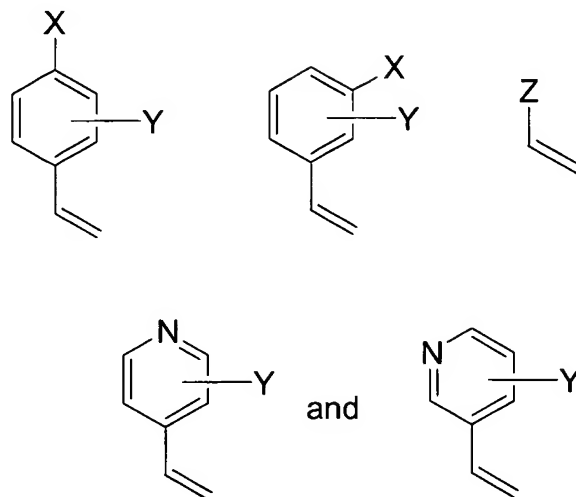


II ,

a compound VII selected from:



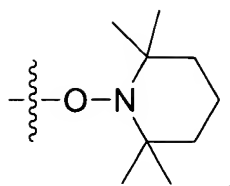
and a compound VIII selected from:



wherein the ratio of the compound VII and the compound VIII is about 2:1.

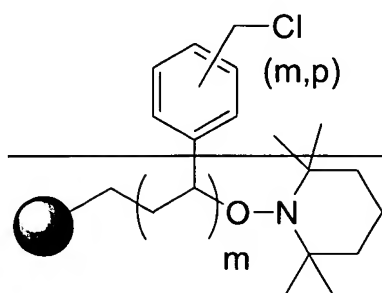
6. (Original) The process according to Claim 5 wherein  $R^4$  is




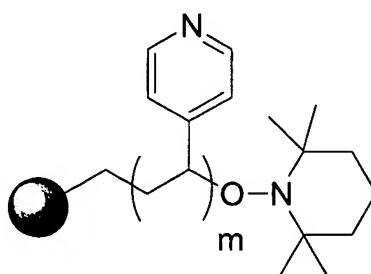



7. (cancelled)

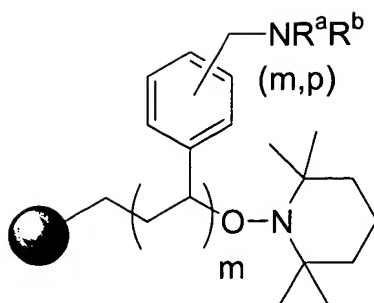
8. (Currently amended) A compound which is selected from:




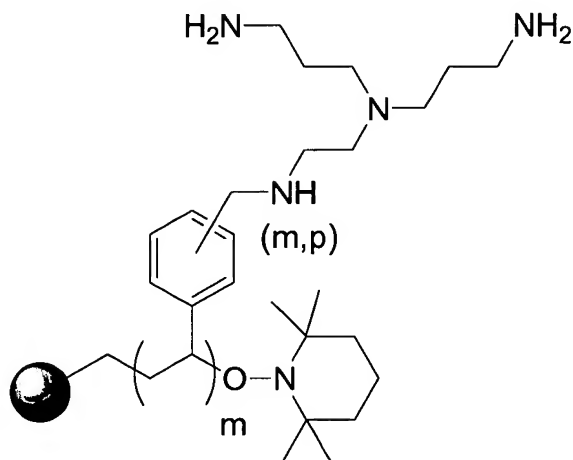
wherein  is a polystyrene resin, m is from 1 to 100 and the chlorine content is from about 5 to about 7 mmol/gram of resin;




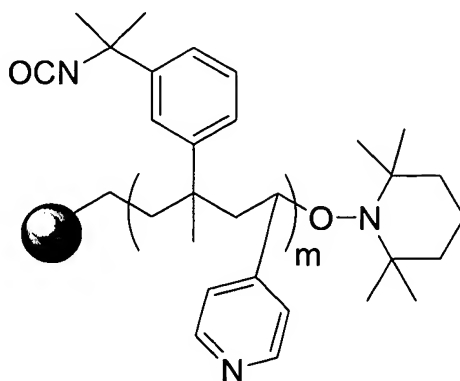
wherein  is a polystyrene resin, m is from 1 to 100 and the pyridyl content is from about 5 to about 7 mmol/gram of resin;




wherein  is a polystyrene resin, m is from 1 to 100,  $\text{-NR}^a\text{R}^b$  is selected from diethylamino, diisopropylamino, piperidinyl, morpholino and piperazinyl and the amine content is from about 4 to about 7 mmol/gram of resin;

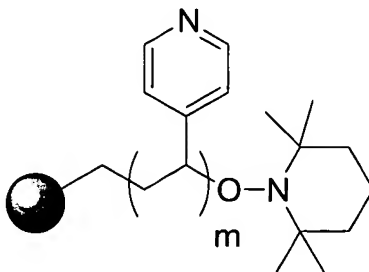



wherein  is a polystyrene resin, m is from 1 to 100, and the amine content is from about 3 to about 6 mmol/gram of resin; and



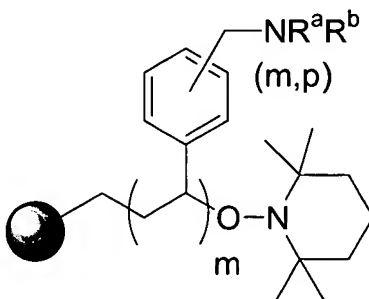
wherein  is a polystyrene resin, m is from 1 to 100, and the isocyanate content is from about 1 to about 4 mmol/gram of resin.


9. (previously presented) The compound according to Claim 43 ~~8~~ which is



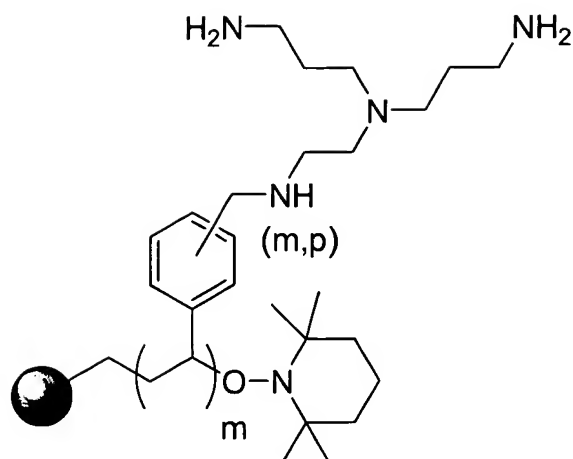
wherein  is a polystyrene resin, m is from 1 to 100 and the pyridyl content is from about 5 to about 7 mmol/gram of resin.


10. (previously presented) The compound according to Claim 43 ~~8~~ which is



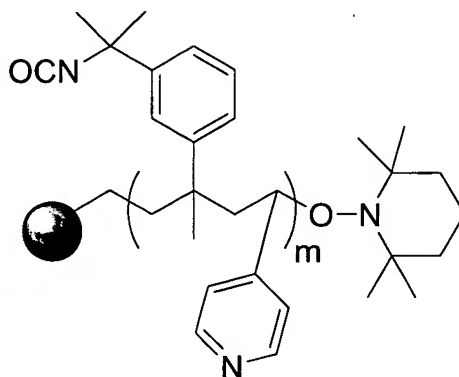
wherein  is a polystyrene resin, m is from 1 to 100, -NR<sup>a</sup>R<sup>b</sup> is selected from diethylamino, diisopropylamino, piperidiny, morpholino and piperaziny and the amine content is from about 4 to about 7 mmol/gram of resin.


11. (previously presented) The compound according to Claim 43 ~~8~~ which is



wherein  is a polystyrene resin, m is from 1 to 100, and the amine content is from about 3 to about 6 mmol/gram of resin.

12. (previously presented) The compound according to Claim ~~13~~ 8 which is



wherein  is a polystyrene resin, m is from 1 to 100, and the isocyanate content is from about 1 to about 4 mmol/gram of resin.

13. (cancelled)

14. (cancelled)